

Setting up a Registered Apprenticeship Program

Quick Overview for Potential Employers



Foreword

The demand for all classifications of skilled journey workers is increasing more rapidly than the supply; the need for the skills of these workers is becoming critical. The best possible method for developing employee skills is the formal Registered Apprenticeship System of training that is cost effective, goal oriented and designed to meet the specific skill needs of the employer. At the present time, there are approximately 1,000 occupations that are apprentice-able in all major industries throughout the United States, and the list is growing almost daily. The purpose of this booklet is to describe how Registered Apprenticeship programs may be developed and established in any industry and for any occupation requiring skills that take one or more years to learn.

Increasing demands on the abilities and experience of workers who need expanded training due to changing methods, products, materials and technology call for a new look at the method of training. Formal Registered Apprenticeship is the key to a highly skilled and stable workforce.

Apprenticeship

An apprenticeship program is an effective method of training workers:

- On the job
- For a specific length of time
- At predetermined rates of training pay

- For a specific range of skills
- In one particular occupation
- With stated hours of instruction
- Under a written agreement between the program sponsor and the apprentice.

The program sponsor is usually an employer who needs highly skilled workers. The sponsor may be in any industry, such as:

- Manufacturing
- Construction
- Wholesale and Retail
- Printing and publishing
- Finance, insurance and real estate
- Services
- Information Technology
- Health Care
- Hospitality

Registered Apprenticeships will continue as long as there is a need for highly skilled workers and employers willing to invest the effort needed to obtain and retain this type of employee.

Apprentices

Apprentices are employees who are subject to the same rules and policies governing other employees in the firm or organization. They are called apprentices because they are:

- Learning a skill on the job
- In a wide range of skills
- Over a period of at least 2,000 hours
- Under a written agreement with an employer
- Receiving job-related technical instruction

They are usually selected as apprentices on the basis of what will be required of them to become skilled workers in a particular occupation. This means that they may have:

- A specific level of education
- A knowledge of mathematics (if applicable for the occupation)
- Physical capabilities to perform the work required

All of these, or some of these, it depends on the demands of the skills to be learned. A program may hire one or more apprentices, depending on the needs of the sponsor.

How is an Apprenticeship Program Started?

There are two courses of action open to employers based on whether or not their employees are affiliated with a labor organization.

If there is no labor agreement:

1. Determine the knowledge and skills needed for the occupation or occupations to be included in the program.
2. Secure the cooperation of the workers and craft supervisors who will be expected to be included in the program.
3. Have the advisory groups arrange with the local vocations education director, school superintendent, or community college personnel for necessary related classroom instruction, or supervised correspondence type instruction or online instruction.
4. Appoint an apprenticeship supervisor to maintain the standards of training established by the advisory group for the occupations involved, length of training, selection procedures, affirmative action plan, wages, tests, number to be trained, etc.
5. Basic details of the program should be written up as a set of apprenticeship standards. Local registration agencies will assist in the development of the apprenticeship standards.

Human Resources or Training Directors could spearhead the program.

If there is a labor agreement:

1. Discuss the proposed program with the appropriate union official if the training involves employees who would be covered under the collective bargaining agreement.
2. Set up a joint apprenticeship committee (JATC) to administer the program. The committee should have equal representation of labor and management, perhaps three members from each labor and management.

3. The committee will arrange for necessary related classroom instruction with the local education system, usually through vocational education, community colleges, supervised correspondence type instruction or on-line instruction.
4. The committee should agree on a set of standards for training, including occupations, length of training, selection procedures, affirmative action plan, wages, number of apprentices to be trained, etc.
5. Basic details should be in writing and approved as the standards of the apprenticeship program.
6. If the union has no interest in jointly administering the apprenticeship program, the company should obtain a written waiver from the union so that it can adopt an alternative course of action.

Technical Assistance:

The following is available in the planning and development of an apprenticeship program:

1. General guidelines for developing procedures and standards recommended by the Office of Apprenticeship (OA) or a State Apprenticeship Council (SAC) recognized by OA.
2. Published standards of apprenticeship in many occupations and industries that may be of valuable assistance in helping to formulate a program for a specific company or industry.
3. Apprenticeship representatives from the Office of Apprenticeship, U.S. Department of Labor, or from State Apprenticeship agencies are ready and willing to provide knowledgeable assistance in the development of apprenticeship programs.
4. Community and Private Colleges, Vocational schools, Correspondence Courses, and organizations at the state, county and municipal levels that can assist in arranging for necessary related instruction courses.

Recommended Minimum Standards:

Basic standards for a good apprenticeship program have been established by the Secretary of Labor and described in Title 29 of the Code of Federal Regulations, Part 29. To conform to

those minimum standards, an apprenticeship program must contain provisions for the following:

1. The starting age of an apprentice to be not less than 16.
2. Full and fair opportunity to apply for apprenticeship.
3. Selection of apprentices on basis of qualifications.
4. A schedule of work processes in which an apprentice is to receive training and experience on the job.
5. Organized instruction designed to provide the apprentice with knowledge in technical subjects related to the occupation (a minimum of 144 hours per year is recommended).
6. A progressively increasing schedule of wages.
7. Proper supervision of on-the-job training with adequate facilities to train apprentices.
8. Periodic evaluation of the apprentice's progress, both on-the-job and in related instruction.
9. The maintenance of proper records.
10. Employee-employer cooperation.
11. Recognition for successful completion.
12. Non-discrimination in all phases of apprenticeship.

Basic Provisions:

Provisions in any apprenticeship program should include:

1. **Occupations:** Determine what occupation or types of jobs will be covered by the program. It could be an occupation or trade from the list of currently apprenticeable occupations, or it could be a new apprenticeable occupation.

2. **Work processes:** List the major on-the-job training tasks for each occupation separately. (Will these processes develop the all-around skilled worker you need?)
3. **Allocation of work training time:** Determine the relative difficulty and importance of each work process and allocate the amount of training time, that is, the time in which the apprentice is expected to work on the particular process to become proficient.
4. **Term of apprenticeship:** OA has recognized the following three methods for compliance with the minimum time and allocation requirements:
 - Time-Based Requirements – a time-based occupation requires a minimum of 2,000 hours, which includes an outline of the specific work processes and the approximate time requirement for each individual work process under that occupation.
 - Competency/Performance Program Requirements – Competency/performance based apprenticeship programs are premised on attainment of demonstrated, observable and measurable competencies in lieu of meeting time based work experience and training on-the-job requirements. However, these programs still have to comply with the requirement for the allocation of the approximate time to be spent in each major process. Therefore, work experience process schedules and related instruction outlines must specify approximate time of completion or attainment of each competency, which can be applied toward the 2,000 hour requirement (competencies demonstrated notwithstanding and assuming no credit for previous experience). In competency/performance based programs apprentices may accelerate the rate of competency achievement or take additional time beyond the approximate time of completion or attainment due to the open entry and exit design.

Competency is defined as “an observable, measurable pattern of skills, knowledge, abilities, behaviors and other characteristics that an individual needs to perform work roles or occupational functions successfully”.

Competency/performance based training programs have the following characteristics:

- Competencies should be identified and defined through a job/task analysis and directly related to the job/role.

- Organized learning activities should be structured and wherever possible, self-paced with open entry and open exit.
 - Measures or tests of competency attainment should be observable, repeatable and agreed to in advance.
 - Work experience process schedules and related instruction outlines should include the approximate time/hours or minimum – maximum times/hours for each competency attained in order to document successful completion.
- Hybrid Program Requirements:

In addition to time-based programs which have a fixed set time for completion (i.e. 2,000, 4,000, 6,000 hours) and competency/performance based programs, a third alternative has evolved which, in effect, is a “hybrid” of the two types of programs previously mentioned. This third type of program is basically a combination time and performance considerations whereby work processes are developed with a minimum – maximum time/hours for each task or job requirement (i.e. minimum 200 hours – maximum 400 hours). (Reference Office of Apprenticeship Bulletin 95-06)

- Certificate of Completion of Apprenticeship – Minimum Hourly Requirements:

While competency/performance based programs document the levels of an apprentice’s skill attainment toward advancement and completion not addressed by the traditional time-based program, time considerations are still important, especially in awarding a Certificate of Completion of Apprenticeship. In order for an apprentice to be awarded a Certificate of Completion of Apprenticeship, he/she is required to have worked as a registered apprentice in the apprenticeable occupation under the program sponsor requesting the certificate for a minimum of 1,000 hours.

All apprenticeship program sponsors (existing and new) should be made aware of the options available to them in developing their work process schedules and related instruction outlines. Also, program sponsors should be informed that an apprentice must work as a registered apprentice under the program sponsor within the apprenticeable occupation for a minimum of 1,000 hours

(competencies demonstrated notwithstanding and assuming no credit for previous experience), before a Certificate of Completion of Apprenticeship will be awarded by OA.

5. **Apprentice qualifications:** What qualifications will applicants need to enter your program? Qualifications should be clear and objective and equal opportunity should be stressed. Will they need a high school education? Will they need to need to have studied specific subjects in high school to participate in your training? Are there specific physical, mental or health requirements because of the type of occupation?
6. **Related classroom instruction:** In addition to the broad skills and knowledge best learned on the job, classroom instruction related to the skill is also a requirement. The recommended minimum for curriculum training is 144 hours per year. Training is usually provided by a local vocational school or community college, supervised correspondence or on-line instruction. It is suggested that the local community college be asked to assist. For other options, contact the Office of Apprenticeship.
7. **Number of apprentices:** The number of apprentices to be trained is usually determined by a ratio of apprentices to skilled workers. Such a ration is based on the facilities available for employing and training apprentices and on future employment opportunities. Since apprentices learn from a skilled worker, the quality of training largely depends on the number of skilled workers available to instruct the apprentices and the ability of the skilled workers as instructors.
8. **Apprentice wages:** A common method of expressing the apprentice wage or at least of arriving at it is a percentage of the skilled worker rate. There should be a progressively increasing schedule of wages with increases at specific intervals (i.e. every six months). The increases should be scheduled throughout the apprenticeship to provide both a monetary incentive and reward for steady progress on the job and in the classroom. During the last period of the apprenticeship, the apprentice should reach 90 to 95 percent of the rate paid a skilled worker in the occupation.
9. **Supervision of apprentices:** Apprentices are customarily under the supervision of a skilled worker to whom they have been assigned. In large apprenticeship programs, an apprenticeship supervisor is designated or employed on a part- or full- time basis and assigned the responsibility for carrying out the program. In small programs, this responsibility is basically that of the employer.

10. Apprenticeship agreement: Your program should provide for the signing of an agreement of apprenticeship between each apprentice and the proper officer of the establishment for registration purposes with the appropriate State or Federal apprenticeship agency serving the area where the program is established. The agreement should include: a) home address and birth date of the apprentice; b) name of the employer; c) term of apprenticeship; d) wage schedule; e) length of probationary period; f) outline of the work process schedule; g) curriculum outline of the related instruction; h) number of hours per year the apprentice agrees to attend classes, subjects, and name of school; i) any special provisions such as credit for previous experience; j) signatures of the employer and apprentice. If a union is involved, its' approval may be necessary, or if a joint apprenticeship committee exists, such a committee would approve the agreement.

On-the-Job Instruction

The apprenticeship program should be established on the basis of what the apprentice must do and know in order to perform the operations of the job in a safe and satisfactory manner. Selecting the skilled workers who will conduct the training and acquainting them with the job to be done is an important first step. They should be thoroughly skilled in those phases of the occupation they are going to teach. They should definitely be interested in the progress of apprentices on the job.

In teaching job skills, the instructor will ordinarily proceed as follows:

1. Question apprentices regarding what they know about the operation or process.
2. Demonstrate each operation by slowly performing each new process or step, emphasizing key points and safety precautions.
3. Have apprentices perform the operation, assisting if help is needed.
4. Have apprentices repeat the work several times under observation until satisfied that they can do it alone, safely and correctly.
5. Continue the supervision and encourage questions to assure that apprentices are carrying out the methods and processes that have been taught.

Cost of Apprenticeship

Because apprentices are paid wages while they learn and because in larger business establishments a supervisor of apprentices and one or more instructors may be employed, cost is considered by some potential sponsors as a governing factor in establishing a program. Employers agreed that apprentices generate a net return during their apprenticeship.

It is difficult to apply the accountant's yardstick to apprenticeship. However, the work apprentices perform as they learn more than pays their way.

Primary costs of apprenticeship:

- Time (wages) of personnel in administering program
- Capital and equipment
- Materials and supplies
- Related instruction (wages, tuition, books, time)
- Reduced output of apprentices and journey workers
- Supervisory and journey worker time

A larger perspective on Apprenticeship Costs/Benefits:

- Benefits/costs are not experienced equally
- Employers find apprentices more productive
- Overall, estimated productivity was 26.5% more than journey workers trained elsewhere

Poaching Risk:

- On a ten point scale, employers estimated the seriousness of poaching from competitors as 5.1
- Estimated seriousness of poaching by other industries as 4.8
- Larger organizations viewed poaching more seriously than smaller ones

To find the break-even production time for employees:

If it takes one hour for a skilled worker to do a certain job, and it takes two hours for the average beginning apprentice to do the same job, then it is taking the apprentice twice as long to do the same job. The beginning apprentice is only 50% productive. Therefore, the beginning wage should be 50% of the skilled worker's wage rate. The apprenticeship sponsor applies this

rate to the first six months of work by the apprentice. This same method of determining the break-even production is applied for every six-month period. If, in the second six months, the average apprentice is doing the work in an hour and a half compared with one hour for the skilled worker, then the wage rate should be 55% of the journey worker rate and so on up the scale until the final period of apprenticeship when the wage rate should be approximately 90 to 95%.

In other words, the program sponsor is only paying what the apprentice is worth in terms of production or services.

This method of determination of break-even production time could also be modified by the time lost by the skilled worker assigned to the apprentice for training purposes.

Things to Remember

A few important items should be kept in mind when planning an apprenticeship program.

1. **Equal opportunity:** All application, testing and selection procedures, as well as employment and training, must be conducted based on equal opportunity without regard to race, color, creed, sex, national origin or unrelated disabilities. This equality of selection and employment will ensure compliance with Federal and State laws and regulations which provide for non-discrimination in Apprenticeship.
2. **Pre-employment tests:** Evaluation of applicants is usually made by the management, the union, or by the joint apprenticeship committee (if such exists). If an occupation-related skill level determination/examination is given to all applicants, it must not be used as a pass-fail tool, but instead the test score is applied to the overall evaluation score of the applicant.
3. **Apprenticeship Committee:** The decision regarding the existence of an apprenticeship committee rests solely with the employer and the union or organization. Its' functions are decided in the same way. These might include general supervision of the program, selection and enrollment of apprentices, arranging for their employment with the employer, if more than one employer is involved (in cases of apprenticeship programs sponsored through employer associations), keeping all parties informed on the progress of apprentices, and checking and evaluating the performance of individual apprentices.

4. **Credit for previous experience:** Programs should include a provision on credit for experience in the occupation or occupation related skills. It could be in the language of the agreement – “The apprentices’ experience in the occupation will be evaluated and appropriate credit will be allowed for such experience. The apprentice allowed credit for previous experience will be advanced to the wage level appropriate for the amount of credit”.
5. **Certificate of Completion:** A provision is customarily included stating that each apprentice shall be awarded, after satisfactorily completing his or her apprentice training, a *Certificate of Completion of Apprenticeship*. In connection with registered programs, such a certificate is available from the State apprenticeship agency or from the Office of Apprenticeship, if there is no state agency.
6. **Registration of programs:** Apprenticeship programs and apprenticeship agreements are registered with the State Apprenticeship Agency or with the Office of Apprenticeship if they meet the 22 steps. Registration is voluntary. By registration, however, a contribution is made to the national pool of information on apprenticeship programs and the number of apprentices in training. The Office of Apprenticeship maintains a current record of trends, statistics and data on training – information of value to employers, labor, and industry as a whole.
7. **Advantages of an apprenticeship program for your company:**
 - Become a part of the National Apprenticeship Program, thereby creating greater prestige through public recognition both locally and nationally
 - Provide a systematic form of training and develop a more informed employee who fits into the company
 - Ensure training standards of the occupation are met while improving training standards in the industry
 - Identify training standards for performance
 - Require a long term commitment by the employee
 - Gives greater assurance of satisfactory related instruction
 - Attract better applicants and improve employer-employee relationships
 - Develop a more competent employee capable of advancing to more responsible positions within the company
 - Improve productivity as well as profitability
 - Increased output produced by apprentices during and after apprenticeship
 - Resources saved from reduced use of alternative forms of training

- Resource savings from lower administrative costs (e.g. Unemployment Insurance – apprentices have increased employability)
- Resources saved from reduced employee turnover
- Reduced absenteeism
- Facilitate compliance with Federal and State Equal Employment Opportunity requirements
- Improve employee relations
- Ensure availability of related technical instruction

8. **Advantages of an apprenticeship program for an Apprentice:**

- Identifies a detailed, planned training schedule throughout the term of apprenticeship
- Recognition locally, statewide and nationally for successful completion of the program
- Incentive for self-improvement
- Offers the potential to earn college credit upon successful completion of the program
- Requires a long term commitment by the employer
- Ensures the training will meet acceptable national industrial training standards
- Ensures proper related technical instruction in the form of classroom, home study or correspondence courses
- Provides an increasing scale of wages during the entire training period
- Provides full time employment, subject to business conditions
- Provides a broader base for advancement to other positions within a company
- Entitles veterans to collect training benefits from the Veteran's Administration
- Some registered apprenticeship programs also offer dual accreditation through post-secondary institutions that apply credit for apprenticeship completion toward an Associate's Degree
- Individuals completing formal training through registration with the Office of Apprenticeship will receive validated credentials as fully qualified journey level workers.

9. **Minimum wage laws:** If your apprentices are subject to wage and hour provisions of the Fair Labor Standards Act, it will be necessary to start apprentice wage rates at least at the minimum statutory rate. Related supplement classroom instruction does not include time spent by the apprentice in performing his or her regular duties. Thus, it will be necessary to determine beforehand in the written agreement whether 1) the

apprentice will be paid for classroom attendance but the hours not considered hours of work or 2) the apprentice will attend class without being paid or the hours counted or 3) the apprentice will attend class as part of the regular workweek and will be paid the regular rate.

Who to contact for assistance

The State Director will assist you through the entire process of setting up your Apprenticeship program.

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